

## ABSTRACT

An Enhanced analysis-by-synthesis Waveform Interpolative speech coder able to operate at 4 kbps. Novel features include analysis-by-synthesis quantization of the slowly evolving waveform, analysis-by-synthesis vector quantization of the dispersion phase, a special pitch search for transitions, and switched-predictive analysis-by-synthesis gain vector quantization. Subjective quality tests indicate that it exceeds MPEG-4 at 4 kbps and of G.723.1 at 6.3 kbps.